

**SITE-TO-SITE DYNAMIC VIRTUAL LOCAL AREA NETWORK**

Abstract

A system for dynamically implementing a plurality of virtual local area networks ("VLANs") across multiple sites is described. In one embodiment, the system includes a first VLAN-capable switch at a first site; a first system under test ("SUT") connected to the first VLAN-capable switch via a first burn rack switch; a second VLAN-capable switch located at a second site remote from the first site; a second SUT connected to the second VLAN-capable switch via a second burn rack switch; and means for connecting the first and second VLAN-capable switches such that the first and second SUTs are connected to a single virtual private network ("VPN"). The means for connecting may consist of either first and second routers respectively connected to the first and second VLAN-capable switches and interconnected via a T1 line or an ATM connection. In an alternative embodiment, the system includes a first VLAN-capable switch located at a first site; a first system under test ("SUT") connected to the first VLAN-capable switch via a first burn rack switch; a second VLAN-capable switch located at a second site remote from the first site; a customer network located at a customer site remote from the first and second sites and connected to the second VLAN-capable switch via a router; and an ATM connection between the first and second VLAN-capable switches such that the first SUT and the customer network are connected to a single virtual private network ("VPN"). In this alternative embodiment, the connection between the second site and customer site may be either an Internet connection or a high speed point-to-point connection.